

What is claimed is:

1. A device for capturing flying insects, said device comprising:  
an insect trap;  
an airflow generator generating (a) an outflow comprising an insect attractant and (b) an inflow;  
an outflow opening communicated to said airflow generator, said outflow opening enabling said outflow to flow outwardly from said device to create a plume flowing downwardly and spreading radially from said device; and  
an inlet opening communicated to said airflow generator and said insect trap and positioned vertically higher than said outlet opening, said airflow generator drawing said inflow substantially counter to and immediately adjacent an upper portion of said plume and then into said trap via said inlet opening such that insects attracted to said outflow and flying along the upper portion of said plume thereof towards said outflow opening intersect said inflow and are thereby drawn into said trap by said inflow.
2. A device according to claim 1, wherein said outflow opening faces downwardly and directs said outflow downwardly.
3. A device according to claim 2, further comprising a tubular member having an open lower end providing said outflow opening.
4. A device according to claim 3, further comprising a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening,  
said tubular member having an open upper end in communication with said inlet opening to enable said inflow to flow through said tubular member and out said open lower end as part of said outflow.
5. A device according to claim 4, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall,

said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet as an annular downwardly facing opening between said edge portion and said tubular member.

6. A device according to claim 4, wherein said airflow generator comprises a fan.
7. A device according to claim 6, wherein said fan is a single fan.
8. A device according to claim 7, wherein said fan is positioned within said tubular member.
9. A device according to claim 8, wherein said insect trap is positioned within said tubular member.
10. A device according to claim 9, wherein said insect trap is a flexible mesh structure.
11. A device according to claim 10, wherein said mesh structure is positioned above said fan.
12. A device according to claim 10, wherein said insect attractant is carbon dioxide.
13. A device according to claim 12, wherein said carbon dioxide is supplied to said tubular member at a point higher than said fan.
14. A device according to claim 13, further comprising a tank containing said carbon dioxide and a hose supplying said carbon dioxide to said tubular member from said tank.
15. A device according to claim 14, wherein said hose supplies said carbon dioxide directly to said tubular member.
16. A device according to claim 15, wherein said tubular member has a port formed therethrough and said hose is connected to said port.
17. A device according to claim 1, wherein said airflow generator comprises a fan.

18. A device according to claim 17, wherein said airflow generator is a single fan.
19. A device according to claim 17, wherein said airflow generator comprises multiple fans.
20. A device according to claim 19, wherein said multiple fans is two fans, one of said fans generating said inflow, the other of said fans generating said outflow.
21. A device according to claim 1, wherein said insect trap is a flexible mesh structure.
22. A device according to claim 1, wherein said insect attractant is carbon dioxide.
23. A device according to claim 22, further comprising a tank containing said carbon dioxide.
24. A method for capturing flying insects using a device for capturing flying insects, said device comprising an insect trap; said method comprising:
  - generating an outflow, comprising an insect attractant, flowing outwardly from said device to create a plume flowing downwardly and spreading radially from said device; and
  - generating an inflow flowing substantially counter to and immediately adjacent an upper portion of said plume and then into said trap such that insects attracted to said outflow and flying along the upper portion of said plume thereof towards said device intersect said inflow and are thereby drawn into said trap by said inflow.
25. A method according to claim 24, wherein said device includes an airflow generator, an outflow opening communicated with said airflow generator, and an inflow opening communicated with said insect trap and said airflow generator,
  - said generating said inflow and said generating said outflow being performed by said airflow generator.
26. A method according to claim 25, wherein said outflow opening faces downwardly and wherein said outflow opening directs said outflow downwardly to create said plume.

27. A method according to claim 26, wherein said device further comprises a tubular member having an open lower end providing said outflow opening; said generating said outflow including directing said outflow through said open lower end.
28. A method according to claim 27, wherein said device further comprises a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening, said tubular member having an open upper end in communication with said inlet opening;  
said generating said outflow and said generating said inflow being performed by drawing said inflow in through said inlet opening into said open upper end and then out through said open lower end so that said inflow is part of said outflow.
29. A method according to claim 28, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall, said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet opening as an annular downwardly facing opening between said edge portion and said tubular member,  
said generating said inflow including drawing said inflow upwardly from said inlet opening between said tubular wall and said tubular member and then into said open upper end of said tubular member.
30. A method according to claim 28, wherein said airflow generator comprises a single fan and wherein both generating said inflow and generating said outflow is performed by operating said fan.
31. A method according to claim 30, wherein said insect attractant is carbon dioxide and said method further comprises supplying said carbon dioxide to said tubular member.
32. A method according to claim 31, wherein said fan is positioned within said tubular member and wherein said carbon dioxide is supplied at a point higher than said fan.
33. A method according to claim 32, wherein said carbon dioxide is supplied directly to said tubular member.

34. A method according to claim 31, wherein said carbon dioxide is supplied directly to said tubular member.
35. A device according to claim 3, wherein said insect attractant is carbon dioxide.
36. A device according to claim 35, further comprising a tank containing said carbon dioxide.
37. A device according to claim 36, further comprising a hose supplying said carbon dioxide from said tank to said tubular member.
38. A device according to claim 37 wherein said hose supplies said carbon dioxide directly to said tubular member.
39. A method for capturing flying insects using a device for capturing flying insects, said device comprising an insect trap; said method comprising:  
generating an outflow, comprising an insect attractant, flowing outwardly from said device to create a plume flowing downwardly and away from said device; and  
generating an inflow flowing substantially counter to an upper portion of said plume and then into said trap, the inflow drawing insects attracted to said outflow and flying along the upper portion of said plume thereof towards said device into said trap.
40. A method according to claim 39, wherein said device includes an airflow generator, an outflow opening communicated with said airflow generator, and an inflow opening communicated with said insect trap and said airflow generator,  
said generating said inflow and said generating said outflow being performed by said airflow generator.
41. A method according to claim 40, wherein said outflow opening faces downwardly and wherein said outflow opening directs said outflow downwardly to create said plume.
42. A method according to claim 41, wherein said device further comprises a tubular member having an open lower end providing said outflow opening; said generating said outflow including directing said outflow through said open lower end.

43. A method according to claim 42, wherein said device further comprises a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening, said tubular member having an open upper end in communication with said inlet opening;

said generating said outflow and said generating said inflow being performed by drawing said inflow in through said inlet opening into said open upper end and then out through said open lower end so that said inflow is part of said outflow.

44. A method according to claim 43, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall, said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet opening as an annular downwardly facing opening between said edge portion and said tubular member,

said generating said inflow including drawing said inflow upwardly from said inlet opening between said tubular wall and said tubular member and then into said open upper end of said tubular member.

45. A method according to claim 43, wherein said airflow generator comprises a single fan and wherein both generating said inflow and generating said outflow is performed by operating said fan.

46. A method according to claim 45, wherein said insect attractant is carbon dioxide and said method further comprises supplying said carbon dioxide to said tubular member.

47. A method according to claim 46, wherein said fan is positioned within said tubular member and wherein said carbon dioxide is supplied at a point higher than said fan.

48. A method according to claim 47, wherein said carbon dioxide is supplied directly to said tubular member.

49. A method according to claim 46, wherein said carbon dioxide is supplied directly to said tubular member.

50. A device for capturing flying insects, said device comprising:  
an insect trap;  
an airflow generator generating (a) an outflow comprising an insect attractant and (b) an inflow;  
an outflow opening communicated to said airflow generator, said outflow opening enabling said outflow to flow outwardly from said device to create a plume flowing downwardly and away from said device; and  
an inlet opening communicated to said airflow generator and said insect trap and positioned vertically higher than said outlet opening, said airflow generator drawing said inflow substantially counter to an upper portion of said plume and then into said trap via said inlet opening so as to draw insects attracted to said outflow and flying along the upper portion of said plume thereof towards said outflow opening into said trap.
51. A device according to claim 50, wherein said outflow opening faces downwardly and directs said outflow downwardly.
52. A device according to claim 51, further comprising a tubular member having an open lower end providing said outflow opening.
53. A device according to claim 52, further comprising a cover member positioned with respect to said tubular member such that an edge portion of said cover member is spaced from said tubular member to define said inlet opening,  
said tubular member having an open upper end in communication with said inlet opening to enable said inflow to flow through said tubular member and out said open lower end as part of said outflow.
54. A device according to claim 53, wherein said cover member is a tubular housing comprising a top wall and a tubular wall extending downwardly from said top wall,  
said tubular housing being positioned over said tubular member such that said tubular wall extends downwardly alongside said tubular member to define said inlet as an annular downwardly facing opening between said edge portion and said tubular member.
55. A device according to claim 53, wherein said airflow generator comprises a fan.

56. A device according to claim 55, wherein said fan is a single fan.
57. A device according to claim 56, wherein said fan is positioned within said tubular member.
58. A device according to claim 57, wherein said insect trap is positioned within said tubular member.
59. A device according to claim 58, wherein said insect trap is a flexible mesh structure.
60. A device according to claim 59, wherein said mesh structure is positioned above said fan.
61. A device according to claim 59, wherein said insect attractant is carbon dioxide.
62. A device according to claim 61, wherein said carbon dioxide is supplied to said tubular member at a point higher than said fan.
63. A device according to claim 62, further comprising a tank containing said carbon dioxide and a hose supplying said carbon dioxide to said tubular member from said tank.
64. A device according to claim 63, wherein said hose supplies said carbon dioxide directly to said tubular member.
65. A device according to claim 64, wherein said tubular member has a port formed therethrough and said hose is connected to said port.
66. A device according to claim 50, wherein said airflow generator comprises a fan.
67. A device according to claim 66, wherein said airflow generator is a single fan.
68. A device according to claim 66, wherein said airflow generator comprises multiple fans.



69. A device according to claim 68, wherein said multiple fans is two fans, one of said fans generating said inflow, the other of said fans generating said outflow.
70. A device according to claim 50, wherein said insect trap is a flexible mesh structure.
71. A device according to claim 70, wherein said insect attractant is carbon dioxide.
72. A device according to claim 71, further comprising a tank containing said carbon dioxide.
73. A device according to claim 72, wherein said insect attractant is carbon dioxide.
74. A device according to claim 73, further comprising a tank containing said carbon dioxide.
75. A device according to claim 74, further comprising a hose supplying said carbon dioxide from said tank to said tubular member.
76. A device according to claim 75, wherein said hose supplies said carbon dioxide directly to said tubular member.